

by a second weight from said first hidden unit to said output, and said second product being a third weight from said predictive symptom to a second hidden unit multiplied by a fourth weight from said second hidden unit to said output.

pub (12)70

- The method according to claim 60, wherein said set of predictive symptoms comprises a plurality of: Mood, Work, and Energy.
- 71. The method according to claim 60, wherein said set of predictive symptoms comprises a plurality of: Mood, Severity, and Middle and Late Sleep.
- 72. The method according to claim 60, further comprising: before step a), providing a set of known baseline patient profiles and treatment outcomes, which known profiles and outcomes are used in step c) for deriving said model.

30. ß(⅙.

The method according to claim 32, wherein said model of step c) is a neural network.

74. st

A method of treating an affective disorder in a patient comprising the following steps:

- a.) defining a set of predictor variables which define a set of data of a baseline patient profile, said set of predictor variables comprising predictive symptoms and a set of treatment options;
- b.) developing an outcome prediction for said set of treatment options, said outcome prediction based upon an analysis of patient symptoms;
- c.) selecting a first preferred treatment option from said set of treatment options based on said outcome prediction;
- d.) applying said first preferred treatment option to said patient; and
- e.) monitoring said patient by comparing a response of said patient to said treatment option to said outcome prediction to provide an updated outcome prediction for said patient.

USSN 09/045,734 Docket No. 2000sd

26. The method of claim 24 further including the step of selecting and applying a second preferred treatment option from said set of treatment options based on said updated outcome prediction when said updated outcome prediction and said outcome prediction differ.

RESPONSE

- The Examiner has requested a substitute specification without the claims. A substitute specification accompanies this response. No new matter is believed to have been added. The corrections requested in the Preliminary Amendment dated July 27, 1998 have been incorporated.
- 2.-6. In response to the Examiner's restriction requirement, the Applicant elected to initially pursue I, claims 1-53 which are drawn to methods for treating depression. Additionally, the Examiner has required an election of species. The species claimed in claims 1-16, 36-38, 42 and 44, a method of treating is elected. Claims 17-35, 39-41, 43, 45-59 have been withdrawn from prosecution at this time. Claims 60-75 have been added and are believed to be readable upon the elected species.

The Applicant thanks the Examiner for his call of June 21, 1999 and regrets having missed it.

In view of the above, the Applicant submits that the application is in condition for allowance and requests that all claims be granted. Should the Examiner have any questions, please contact the Applicant's agent at the telephone number provided below.

Respectfully submitted

Haron L. Day, Ph.D

Reg. Patent Agent

Reg. No. 39,162 9 Pleasant St.

Sharon, MA 02067

(781) 784-9602

(617) 441-5177

Date: 7/21/99